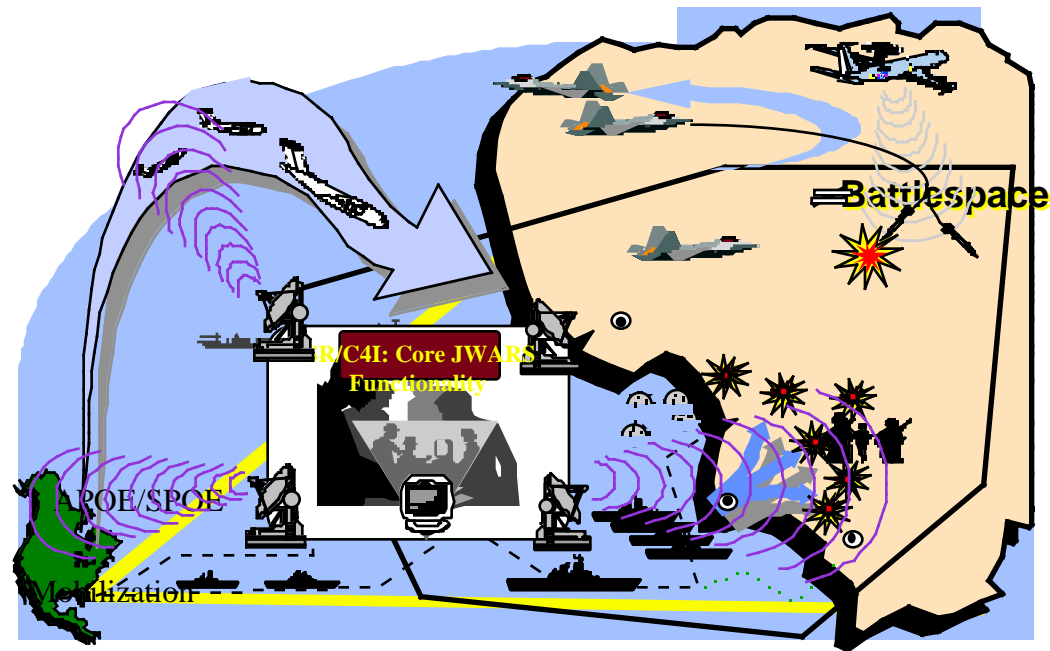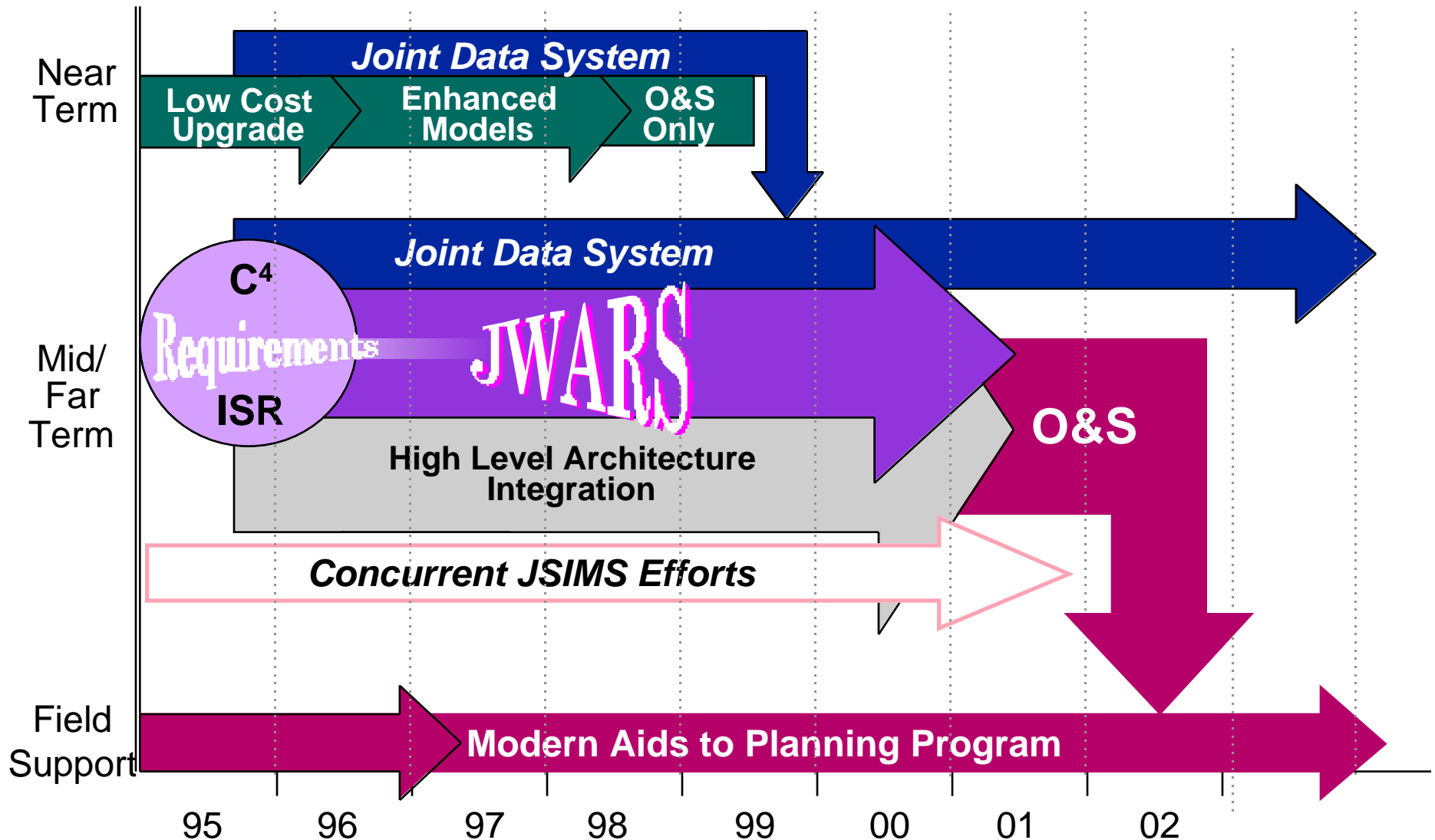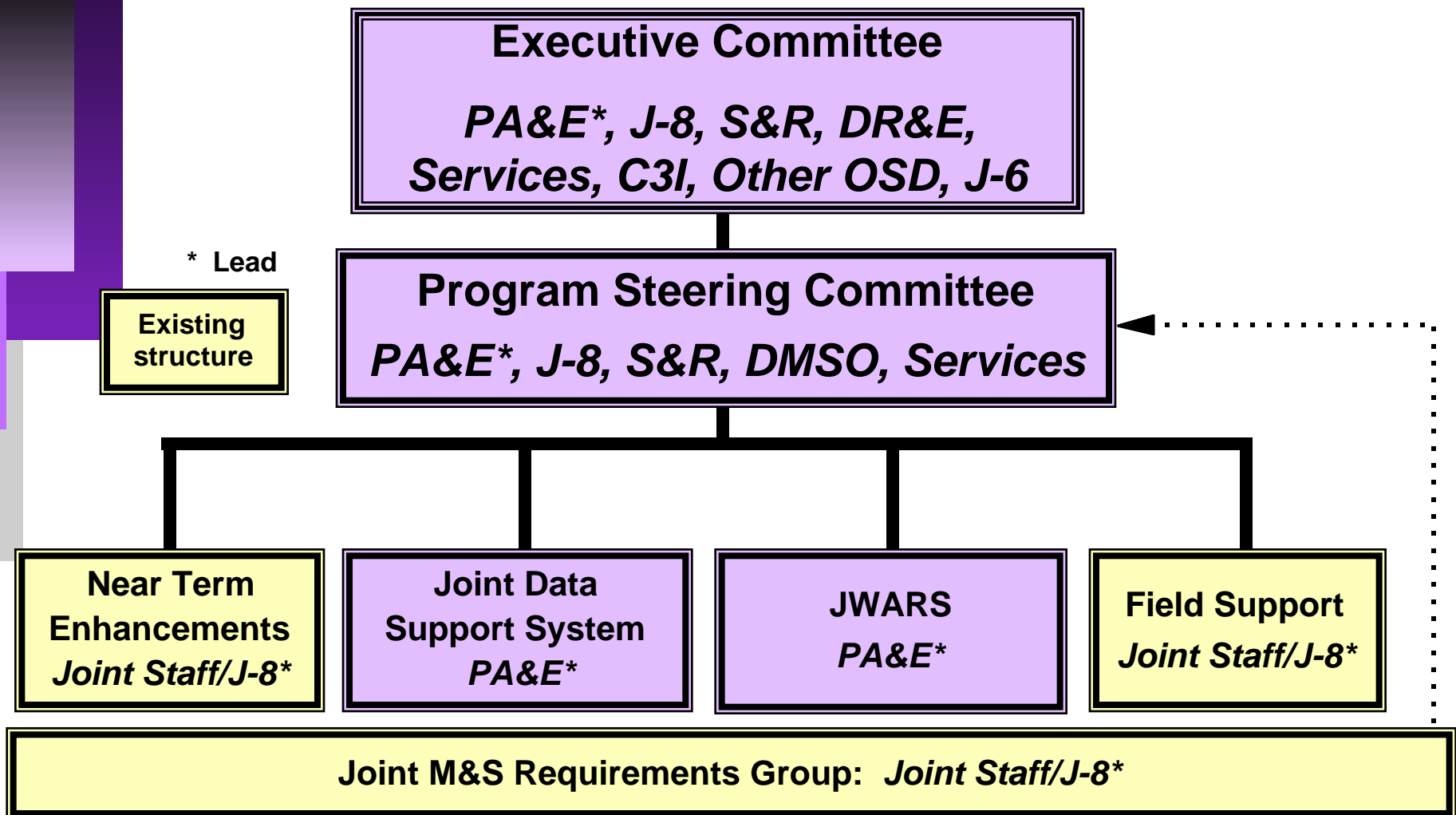# Joint Analytic Model Improvement Program

DMSO Industry Day Presentation
May 22, 1997

Mr. James Johnson
Director Theater Assessment and Planning
Program Analysis and Evaluation
Office of the Secretary of Defense

Joint Analytic Model Improvement Program (JAMIP)

Joint Analytic Model Improvement Program Management Structure

Executive Committee

PA&E*, J-8, S&R, DR&E, Services, C3I, Other OSD, J-6

* **Lead**

Existing structure

Program Steering Committee
PA&E*, J-8, S&R, DMSO, Services

| Near Term Enhancements *Joint Staff/J-8** | Joint Data Support System *PA&E** | JWARS *PA&E** | Field Support *Joint Staff/J-8** |

Joint M&S Requirements Group: *Joint Staff/J-8**

Joint Warfare System (JWARS)

Joint Staff

Users of JWARS

JWCA

CINCs

Services
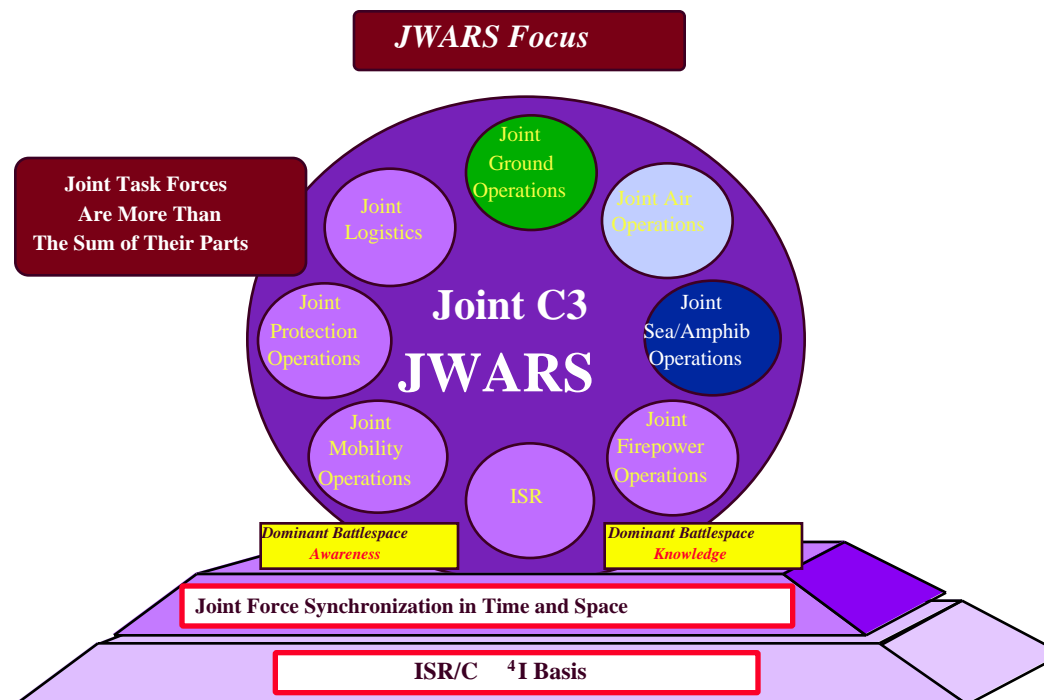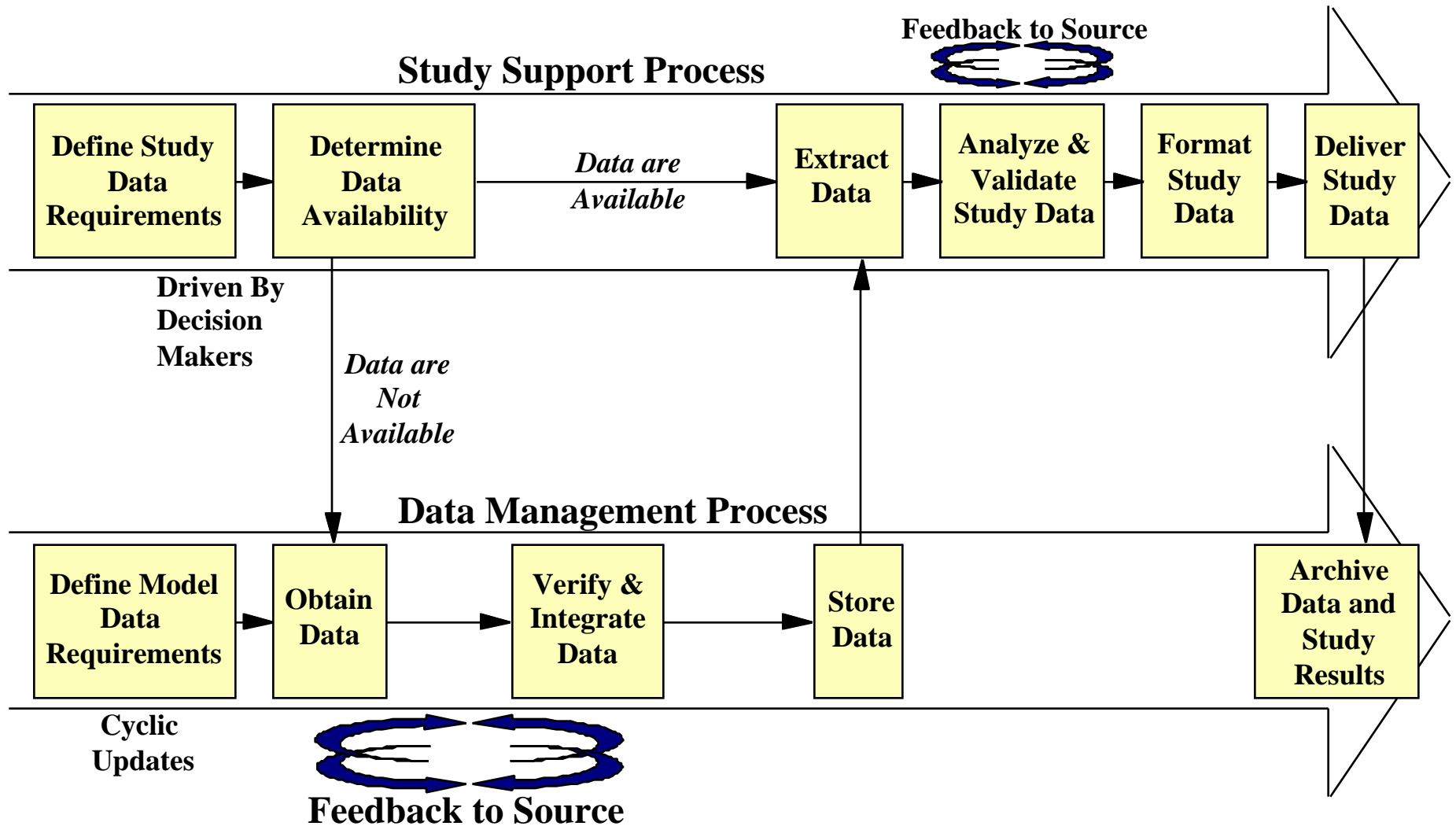
OSD
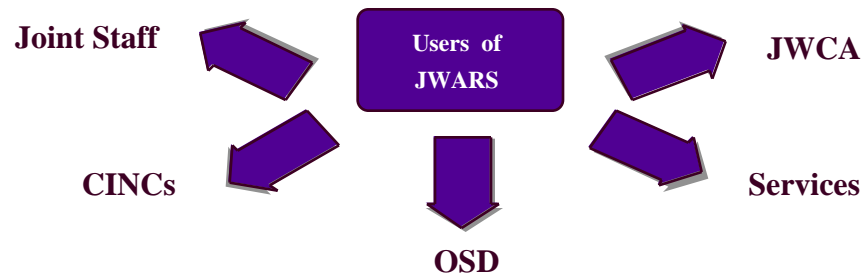
Mission: Develop a fully integrated, state-of-the-art model of joint warfare:

- **Represent *uniquely joint* functions and processes, and component operations**
- **Accommodate joint doctrine and be capable of representing future warfare**

JWARS Focus

Joint Task Forces Are More Than The Sum of Their Parts

Joint Ground Operations

Joint Air Operations

Joint Logistics

Joint C3

JWARS

Joint Sea/Amphib Operations

Joint Protection Operations

Joint Mobility Operations

ISR

Joint Firepower Operations

Dominant Battlespace Awareness

Dominant Battlespace Knowledge

Joint Force Synchronization in Time and Space

ISR/C ^{4}I Basis

Joint Data Support
Overview

Feedback to Source

Study Support Process

| Define Study Data Requirements | Determine Data Availability | *Data are Available* | Extract Data | Analyze & Validate Study Data | Format Study Data | Deliver Study Data |

Driven By Decision Makers

Data are Not Available

Data Management Process

| Define Model Data Requirements | Obtain Data | Verify & Integrate Data | Store Data | | Archive Data and Study Results |

Cyclic Updates

Feedback to Source

JDS Warehouse Architecture
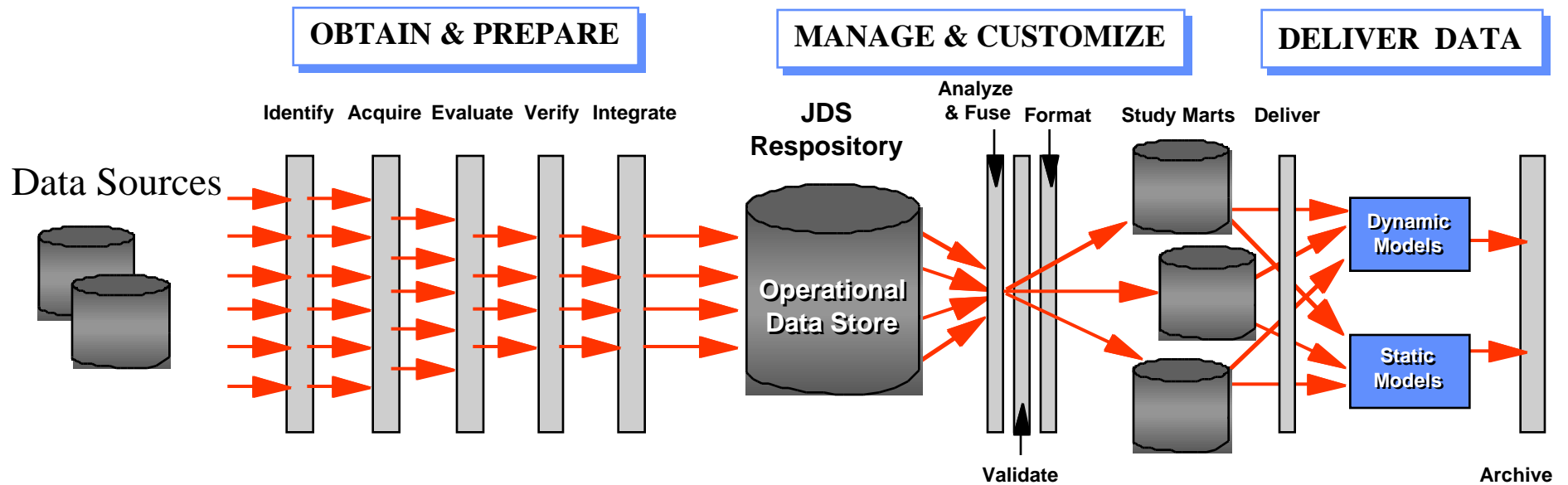
Exciting Challenges

Examples of Technical Challenges

- Event and Postion Management and Performance Speed
- Balance between warfighting and C4ISR system
- Building the capability for user to compose systems and organizations for studies
- Establishing perception, or situational awareness, as the basis for model decision making
- Geometric reference systems for round-earth referencing
- Efficient runtime synthetic environment interaction interface
- Heterogeneous data source environment and data quality

Examples of Interface Challenges

- JSIMS and JWARS technology and information exchange
- Object representation and methodology sharing